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**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Implement the
Commission's Procurement Incentive Framework and to
Examine the Integration of Greenhouse Gas Emissions
Standards into Procurement Policies.

R.06-04-009

**COMMENTS OF THE WESTERN POWER TRADING FORUM
ON TYPE AND POINT OF REGULATION FOR REDUCTION OF GREENHOUSE GAS
EMISSIONS FROM THE ELECTRICITY SECTOR**

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Introduction

In accordance with the direction provided in the November 9th, 2007 Administrative Law Judge's Ruling under Rulemaking 06-04-009, the Western Power Trading Forum ("WPTF") respectfully submits the following comments on the questions raised regarding the type and point of regulation for the reduction of greenhouse gas (GHG) emissions from the electricity sector.

A fundamental question posed in this ruling is whether California should proceed with the development of a state-level GHG trading system, or defer the development of such a system until a regional or national level is in place. While WPTF believes that a federal or regional system is ultimately necessary for real GHG emission reductions (and thus is preferable over a California-only system), we believe that benefits of moving forward initially with a state-level trading system outweigh alternative options for reducing GHG emissions, and are not dependent on development of a regional or national system. Further, in developing a state-level GHG cap and trade systems, California has an important opportunity to influence the design of the emerging federal system and to coordinate with it. For this reason, WPTF supports continued

development of a GHG cap and trade program for California, but nevertheless urges the state to do so with an ongoing recognition that its system must eventually be compatible with a regional and national system.

Thus, alternative designs for a trading system should be considered first and foremost in the context of a future federal system, which is clearly beginning to take shape in Congress. In this regard, WPTF notes that a GHG trading system that places point of regulation primarily with in-state generators (i.e. source-only, first-seller) are more compatible with approaches being considered at the federal level, and with the Regional Greenhouse Gas Initiative (“RGGI”) already developed in the eastern United States. WPTF recommends that the Public Utilities Commission proceed with the development of a first-seller approach for the electricity sector. Our rationale for this recommendation is provided in the response to specific questions below.

3.1. General

Q1. What do you view as the incremental benefits of a market-based system for GHG compliance, in the current California context?

Achievement of GHG emission reduction goals under AB32 will impose significant costs on California’s economy. While a GHG cap and trade system would not eliminate these costs, it theoretically has the potential to reduce them by efficiently distributing costs across capped entities. Under a traditional command and control regulatory approach, all regulated firms would be required to meet the same emission standard, regardless of the relative cost to those entities of complying with the standard. The same level of emission reductions could be achieved at lower overall cost, if a greater portion of these reductions were borne by entities with lower compliance costs.

Under a well-designed cap and trade system, regulated entities that find it extremely costly to reduce emissions can purchase emission allowances from entities with lower relative costs. Trading of emission allowances thus provides all capped entities flexibility to find and use the lowest-cost means of meeting their emission obligations. A trading system can thus achieve emission reductions equivalent to traditional regulatory approaches, but more efficiently and at a lower overall cost.¹ The ability to manage risk through markets that produce price signals allows for efficient implementation of regulatory requirement and economic signals that together with other price signals (e.g. renewable energy credits, capacity, energy and ancillary services) will influence investment choices and provide for the most economic implementation of policy objectives. These markets influence investment decisions, allow for risk management, bolster market liquidity by providing a role for market intermediaries and allow pricing/valuation of various regulatory requirements (GHG, capacity, renewable portfolio standard, demand response).

Q2. Can a market-based system provide additional emissions reductions beyond existing policies and/or programs? If so, at what level? How much of such additional emission reductions could be achieved through expansion of existing policies and/or programs?

In a California-only system, additional emission reductions from the power sector under a GHG cap and trade system are likely to be small, due to the potential for emission leakage outside the state. This is not due to any inherent flaw of emission trading, but rather the fact that the GHG cap will apply to a relatively small portion of the region's electricity market. Further, emission leakage is not unique to emission trading schemes – any regulatory approach that applies to a small geographic region creates incentives for production to shift outside the region

¹ Studies of the US Acid Rain Program found cost savings of 50% compared to traditional regulatory approaches. For an overview of the cost savings potential of emission trading see Ellerman, A. D., et al. 2003. *Emissions Trading in the U.S.: Experience, Lessons, and Considerations for Greenhouse Gases*. Arlington, VA: Pew Center on Global Climate Change.

in order to avoid regulatory costs. Thus, both a cap and trade program and expansion of existing policies and programs probably have similar potential for additional emission reductions in the short term. However, because a cap and trade program would achieve emission reductions more cost-effectively, it has the potential for greater emission reductions in the long-term.

3.2. Principles or Objectives to be Considered in Evaluating Design Options

Public Utilities Commission Staff proposes that the following principles or objectives be used to evaluate GHG program design options and to develop recommendations regarding a GHG regulatory approach. The objectives are not presented in any particular order.

- **Goal attainment:** Does the approach being considered have any particular advantages in terms of meeting overall emission reduction goals? For example, does the approach have any advantages to promoting energy efficiency, combined heat and power, or renewable energy?

- **Cost minimization:** Is the approach likely to minimize the total cost to end users of achieving a given GHG reduction target?

- **Compatibility with wholesale markets and the Market Redesign and Technology Upgrade:** What are the implications of the approach on efficient functioning of wholesale markets generally and the California Independent System Operator day-ahead and real-time markets?

- **Legal risk:** Is the approach at greater relative risk of being delayed or overturned in court?

- **Environmental Integrity:** Does the approach mitigate or allow contract shuffling and the leakage of emissions occurring outside of California as a result of efforts to reduce emissions in California?

- **Expandability:** Would the approach integrate easily into a broader regional or national program? A related consideration is the suitability of the approach as a model for a national or regional program.

- **Accuracy:** Does the approach support accuracy in reporting and, therefore, ensure that reported emission reductions are real?

- **Administrative Simplicity:** Does the approach promote greater simplicity for reporting entities, verifiers, and state agency staff? How easy will the program design be to administer?

Q3. Do you agree with this set of objectives? Are there other objectives or principles that you wish to see included? If so, please include your recommendations and reasoning. Finally, please rank the objectives above, and any additional factors you propose, in order of importance.

WPTF recommends that the criteria of expandability should be considered an overarching objective in the design of California's cap and trade system. Thus, in considering the ability of any particular design option to meet other policy objectives, Commissioners should not consider the option only in the context of a California trading system, but also the potential of the program to meet these other objectives if implemented at a federal level. Regional implementation may ultimately be an important intermediate step to a broad federal approach, should ongoing efforts in Congress fail to achieve success in the next several years.

WPTF ranks the remaining principals as follows:

1) **Compatibility with wholesale markets and MRTU:** WPTF strongly supports a market-based approach to GHG regulation that compliments existing wholesale market structures. The overarching benefit and purpose of wholesale markets is to provide efficient price signals for energy products and services that drive generation dispatch and investment choices in line with state policy goals. The Commission and the CAISO are working toward establishing markets and associated price signals to accomplish policy objects in a number of areas, including capacity, renewable energy credits and additional ancillary services products. A market for carbon should compliment these other efforts, and ensure that GHG regulations do not create incentives that may impair grid reliability or the liquidity of forward power markets.

2) **Cost minimization:** WPTF supports open and competitive markets generally, and considers that a trading system is the most cost-effective means of reducing GHG emissions.

3) **Goal attainment and Environmental Integrity:** While WPTF agrees that it is fundamentally important that a cap and trade system achieve real emission reductions, the

problem of emission leakage is not due to cap and trade design flaws, but rather the limitations of applying the cap to a limited geographic area within a wider electricity market. The potential for emission leakage and/or contract shuffling decreases under a regional cap and trade system, and even more so under a federal system. Further, the potential for emission leakage is not limited to a cap and trade system, but would also be a risk under any regulatory approach. Therefore, WPTF recommends that California not predicate its choice of the type of regulation on its ability to address emission leakage, but rather its effectiveness at reducing emissions if implemented at a regional or federal level. GHG regulation will be most effective in providing incentives for investment in and dispatch of low-emission resources if the price of carbon is internalized at the generator level.

4) **Administrative Simplicity:** A system which is simple and straightforward to implement, both for regulators and regulated entities, will be lower cost.

5) **Accuracy:** This objective is closely linked to environmental integrity. While WPTF considers it extremely important, we rank it lower than other criteria because we do not consider it to be a first-order design criteria, but rather an implementation detail.

6) **Legal risk:** WPTF ranks this criteria last, as it is not feasible to determine ex-ante whether any option for a GHG trading system would stand up to legal challenge. What is certain, and is supported by the contrary legal opinions filed in this proceeding, is that any regulatory approach can and will be challenged by those who oppose it. Clearly, a comprehensive federal approach will avoid constitutional challenges that otherwise could confront a state or regional approach.

Lastly, WPTF considers it imperative that the implementation of a GHG emission reduction program is equitable to all generation owners, whether the assets are owned by a

regulated utility or an independent merchant generator. As an example, many generators are under long-term power purchase or tolling agreements that were entered in to prior to the passage of AB32 - contracts that did not envision GHG control or allowance costs. The implementation of GHG emission reduction program should not create any unfair advantage for the utility owned generation by allowing a direct pass through to consumers of their GHG compliance costs, without ensuring appropriate cost recovery mechanisms for merchant generation, consistent with existing contracts.

3.3. Load-Based Cap-and-Trade System Design

Under a load-based approach, the regulated entities would be the retail providers of electricity to California consumers. Retail providers would be required to surrender allowances for the GHG emissions associated with all power sold to end users in California. Generators would not have a compliance obligation under this system, except possibly for exported power, as discussed in more detail below.

Q4. With a load-based cap-and-trade system, should exports from in-state generation sources be included and accounted for under the cap? Why or why not? If so, how? For example, exports could be captured in a cap-and-trade system by regulating in-state resources that export, or by counting the emissions associated with exported power, without any compliance obligation on the exporter. There may be other options as well.

WPTF does not support a load-based approach, due to its inconsistency with principles and priorities identified above. Should a load-based approach be considered, then provisions should be made to address exports so that emissions from exported power do not offset reductions achieved under the cap. Under a TEAC model for a load-based system all in-state resources could be required to certify all generation.

Q5. How extensive do you view the threat of contract shuffling under a load-based program, given the accessibility of clean resources within the western interconnect? What mechanisms do you propose to combat this possibility? On what basis do you support your position?

Under a load-based system that uses contracts and settlement data to assign emissions to retail providers, there will be ongoing potential for contract-shuffling. Contract-shuffling would be reduced under a first-seller approach, since the proportion of load for which it is necessary to assign emissions (i.e. imports) would be smaller than under a load-based system.

Under a load-based system, three basic options may be used to match a retail provider's load to the sources of electricity used to serve the load: (1) the use of contracts and settlements data, (2) the development of a tracking system to facilitate matching sources to loads, with unclaimed sources pooled and assigned to all retail providers for any electricity that cannot be accounted for on a specified basis, and (3) the use of a tracking system and tradable emission attribute certificates (TEAC) to ensure that all electricity is assigned.

Q6. Which of these systems best accounts for all imports? What are the advantages and disadvantages of each potential tracking system in terms of accuracy, cost of development and administration of tracking systems, costs of administration to the parties, and overall costs to ratepayers? Are there alternative tracking approaches that you would recommend, and for what reasons?

Due to the potential for contract-shuffling noted above, a load-based system based on contracts and settlements data will not provide reliable signals for import of low-emission power. In addition, it will also be inherently inaccurate because assigned emissions will not reflect actual dispatch of generators, and because default emission rates will be required for unspecified power purchases.

A tracking system would improve accuracy somewhat, in that the overall system emissions and output of generators could be tracked. However, because the system would still assign average emissions rates for unspecified power purchase by individual retail providers, accuracy at the entity level would be lower.

A TEAC model for a load based system would enable emissions to be accurately assigned to retail providers and would be more compatible with the CAISO markets than other load-based models, because the certificate revenue received by generators would be reflected in

bid prices, and thus incorporated into dispatch decisions. However, a TEAC model would have high startup costs and would be much more administratively complicated than a first-seller approach.

Q7. If a load-based approach is pursued, would the potential benefits of a full TEAC system be great enough to warrant the start-up and administrative costs?

While WPTF considers a TEAC model to be preferable to other load-based approaches, our strong preference is for a first-seller approach. If a load-based approach is adopted regionally, then WPTF believes that implementation of a TEAC system would be warranted.

3.4. Source-based Cap-and-trade System Design Options

3.4.1. Pure Source-based (GHG Regulation of In-state Generation Only)

Under an in-state-only source-based approach, the regulated entities would be the power plants located in California that generate electricity and emit GHGs. Under such a system, electricity use associated with imports would not be directly regulated under the cap-and-trade system. Instead, other policies and programs such as energy efficiency and the Renewable Portfolio Standard (RPS) would be utilized to decrease reliance on imported GHG-intensive power sources.

While WPTF understands the Commission's objectives in utilizing RPS and energy efficiency to offset demand for imported GHG intense sources, the Commission should consider the likelihood that federal and/or regional GHG programs will be enacted which will result in lower-cost market-based solutions to reach GHG objectives.

Q8. Do you view this approach as compliant with Assembly Bill (AB) 32? Please support your answer.

Exclusion of imported power from a cap and trade system would competitively advantage out-of-state generators in California power markets, as these generators would not face additional costs due to the GHG trading system until source-based systems are implemented in the exporting regions. In the interim, the lower cost of out-of-state generators and the higher

market clearing prices within California would increase net imports, and the likelihood of emission leakage. This outcome would be incompatible with the goals of AB32, which requires that emission reduction measures minimize costs and maximizes benefits for California's economy...maintains electric system reliability..."² For this reasons, WPTF recommends that imported power be included in the GHG trading system.

The threat of leakage can be viewed over two time horizons: short-term and long-term.

Q9. In light of the relatively high capacity factors of carbon-intensive facilities outside the state, how extensive do you expect the short-term threat of substituting higher-carbon imports for in-state generation to be? Might this possibility be dealt with through specific program design (e.g., allocations, limiting conditions, etc.)?

Under a California-only source-based GHG trading scheme, emissions leakage would occur in the short-term. A system that includes power imports under the cap would reduce this leakage, because it would reduce the cost differential that would occur between in-state and imported power under a purely source-based system. WPTF does not believe that emission leakage should be addressed through design elements such as allocation or limiting conditions, as these would reduce the efficiency of the overall trading system.

Q10. Given existing procurement oversight and the prospect for a regional or federal GHG program in the foreseeable future, how extensive do you expect the threat to be of a longer-term shift of production to regions beyond the reach of a California source-based cap-and-trade regime?

The potential for emission leakage decreases substantially under a regional (i.e. WECC-wide) GHG trading system, and again under a federal system. WPTF expects that federal legislation for a GHG trading program will be adopted within in the next few years. A shift of production out of region should not be a concern in the long-term.

² AB32, section 38501, sub-paragraph h.

Q11. If emissions associated with imported power are excluded from a cap-and-trade program, what policies beyond the existing suite of program including energy efficiency, California Solar Initiative, RPS, and Emission Performance Standard (EPS) do you recommend that California employ to achieve the necessary reductions from the electricity sector?

WPTF considers that the programs cited provide important incentives for reducing overall emissions from the electricity sector, including from imported power. In the event that emissions from imported power are excluded from a cap and trade system – which WPTF does not advocate - these programs should be applied consistently to all retail electricity providers. In addition, California should consider using a portion of the additional revenue it receives from a cap and trade program to help defray the above market costs of emerging low and no-carbon generation technologies that would be developed competitively to serve California’s electricity demand.

Q12. As the Public Utilities Commission does not currently have authority to oversee all energy efficiency and renewable procurement programs for all kinds of retail providers (investor owned utilities (IOUs), community choice aggregators (CCAs), electric service providers (ESPs), and publicly owned utilities (POUs)), which agency(ies) should fill in any gaps? Which agency should be responsible for overseeing energy efficiency and renewable procurement for POUs? Would the California Air Resources Board (ARB) have the authority to require certain energy efficiency and renewable targets be met by POUs?

WPTF has no comments on these questions.

Q13. What sources would a source-based system cover? Could it cover California utility-owned facilities located outside of California?

No. If California decides to implement a purely source-based system, then only generators physically situated in California should be subject to the GHG cap.

Q14. Would a strengthened EPS assist in reducing emissions due to California imports? What recommended changes would you make to the EPS?

No. A cap and trade program is the most efficient and cost-effective means of reducing GHG emissions. WPTF urges Commissioners not to abandon a GHG trading system in favor of regulatory approaches that will ultimately be less efficient and more costly for the state.

3.4.2. Deliverer/First Seller

The term “deliverer/first seller” generally refers to the entity that first delivers or sells electricity into the electricity grid in California. For generation within California, the deliverer/first seller (the regulated entity) would be the generator, similar to a source-based system. For imported power, deliverer/first seller would be the entity that delivers the electricity into the California grid (the first sale within California), which could be a retail provider (an IOU, POU, ESP, or CCA) or wholesale marketer.

Q15. Please comment on the “First Seller Design Description” paper, which is Attachment A to this ruling. Does the paper accurately describe the deliverer/first seller program? If not, describe your concerns and include an accurate description from your perspective.

WPTF considers the “First Seller Design Description” paper to be an accurate and fair description of the first-seller approach.

3.4.3. Source-based for In-state Generation, Load-based for Imports

Under this approach, the point of regulation would be the electricity generators for in-state generation and the retail providers for imported power.

Q16. Please describe in detail your view of how this option would work.

Under a first-seller approach, power marketers and independent out-of-state generators would be responsible for emissions for any power that they import into the state. Conversely, under a system that is load-based for imports, the receiving retail provider would be responsible for imports, regardless of who imported the power.

Because retail providers would be required to retire allowances for emissions from imported power, retail providers will factor in the allowance price for power procured out-of-state; i.e, they will be willing to pay less for power from imported resources that cause them to retire allowances. When a retail provider knows in advance that it is procuring imported power, this would ensure that out-of-state generators do not receive a competitive advantage in California markets. However, a problem with this approach occurs when the retail provider is

not directly purchasing power from the out-of-state resources, but rather is purchasing power through the CAISO markets. In this instance, out-of-state generators are able to bid their energy into the CAISO markets at lower prices than similarly situated (e.g. fuel and technology) in-state generators because they do not face the same carbon costs. Because the CAISO will clear the least cost resources first in their economic dispatch, this price differential will favor dispatch of out-of-state generators in these markets. This outcome can not be avoided, unless the CAISO factors carbon cost (i.e. allowance price) into bids from imported power when making dispatch decisions.

Q17. Do you support such an approach? Why or why not?

Because of the competitive advantage that an approach that is source-based for in-state generators and load-based for imports would bestow on out-of-state generation, WPTF consider such an approach to be far inferior to a first-seller approach.

Q18. Does this approach have legal issues associated with it? Provide a detailed analysis and legal citations.

WPTF has no comment on this question.

Q19. If retail providers are responsible for internalizing the cost of carbon for imported power, all power generated in-state may need to be tracked to load to avoid double regulation of in-state power. Do you agree?

Under an approach that is source-based for in-state generators and load-based for imports, it would be necessary to distinguish between in-state generation and imported power sold into the CAISO markets, and to apportion the emissions associated with imported power to retail providers based on their purchases from the CAISO markets. This is yet another reason that WPTF does not support a load-based approach for imports.

Q20. If that is the case, does a mixed source-based/load-based approach offer any advantages compared to a load-based approach in terms of simplifying reporting and tracking? What if the load-based system uses TEACs? How could imports be

differentiated from in-state generation in a way that reduces the complexity of reporting and tracking compared to a load-based approach?

A mixed source-based/load-based approach does not substantially simplify reporting and tracking compared to a load-based approach, nor would it be improved by the use of TEACs.

3.5. Deferral of a Market-based Cap-and-Trade System

In this scenario, a California-only cap-and-trade system would not be implemented for the electricity sector at this time. Instead, California would work with other Western states to develop a Western Climate Initiative cap-and trade system and/or work toward a national cap-and-trade program. In the meantime, existing policies and programs in the electricity sector may need to be ramped up to meet the AB 32 goals.

Several variations of this option may be possible. For example, a load-based cap could still be developed for retail providers, with assignment of individual entity obligations and trading available within the California electricity sector only, but not with other sectors. A second alternative would be to develop individual entity caps (or carbon budgets) which entities could not exceed without facing penalties or fees, but not allow for any trading of allowances at this time. Another option would be to ramp up the mandatory levels of existing programs such as the energy efficiency and RPS programs to higher goals, and make all retail providers obligated to meet these additional goals, without assigning specific cap levels to individual entities.

Q21. How important is it that a cap-and-trade system be included in the near-term as part of the electricity sector's AB 32 compliance strategy?

Deferral of an emission trading program does not change California's obligation to reduce GHG emissions under AB32. Because California must go forward with programs to reduce GHG emissions, it should do so in the most cost-effective way possible. In WPTF's view, this would be through implementation of a broad-based GHG trading program, encompassing as many sectors and sources as practically feasible.

While a California-only GHG cap and trade system for the electric sector is a third best option compared to a federal or regional cap and trade system, it is far superior to an electricity-sector only trading system and traditional command and control regulation, including emissions caps without trading, and ramp-up of existing programs. These alternatives would be costlier for

regulated entities, and thus consumers, and would set an inappropriate precedent for a federal or regional system. The Commission should reject these alternatives, and proceed with development of a GHG trading system. At the same time, California should continue to advocate for a federal level system. A regional system may be an appropriate intermediate step, should the federal government fail to implement a comprehensive system in the next several years.

Q22. Would your answer to Q21 be different if there is no market-based cap-and-trade system? If so, please explain.

WPTF strongly supports a GHG cap-and-trade system, which is currently the leading approach being considered by Congress.

Q23. Address the following:

- **How emission reduction obligations could be met if there is no cap-and-trade system for the electricity sector,**
- **How increased programmatic goals would impact rates, and**
- **How deferral of a cap-and-trade program for the electricity sector would facilitate or hinder California's integration into a subsequent regional or federal program.**

The achievement of emission reductions without a cap and trade system would be more costly for the electricity sector, because it would impede the development of true market-based carbon price signals, and in turn hinder the deployment of the most efficient emission reduction tools. This lack of efficiency and flexibility will cause overall costs to the sector – and consumer rates – to be higher than they would be under a cap and trade system.

Deferral of a cap and trade system would also delay the development tracking infrastructure necessary for implementation of a trading system, and miss an important opportunity for the electricity and other sectors to gain experiences with GHG trading. On balance, deferral of a cap and trade program will hinder California's integration into a subsequent federal or interim regional program.

[Q24 deleted – duplicate of Q23]

Q25. If neither a regional system nor a national system is implemented within a reasonable timeframe, should California proceed with implementing its own cap-and-trade system for the electricity sector? If so, how long should California wait for other systems to develop before acting alone?

Because AB32 requires reduction of GHG emissions, WPTF supports adoption of a cap and trade system in California for electricity and other sectors, regardless of whether and when a federal or regional system is implemented. A state-level cap and trade system would be the most cost-effective means of reducing GHG emissions, even in the absence of a federal or regional system. We believe a federal, source-based cap and trade system is likely to be passed in 2009 and implemented by 2012. Therefore it is important that California's approach be designed to be subsumed into such a federal system. The first seller approach is best suited for this transition. A regional approach should only be pursued if it becomes apparent that Congress will not be able to implement a comprehensive federal program by 2012.

Q26. What flexible compliance mechanisms could be integrated into a non-market based GHG emission reduction approach?

WPTF has no comment on this question, as we do not consider a non-market based emission reduction approach to be an appropriate means of achieving GHG reductions from the electricity sector.

Q27. If a market-based cap-and-trade system is not implemented for the electricity sector in 2012, how would you recommend addressing early actions that entities may have undertaken in anticipation of a market?

WPTF has no comment on this question, as we do not consider a non-market based emission reduction approach to be appropriate means of achieving GHG reductions from the electricity sector.

3.6. Recommendation and Comparison of Alternatives

Q29. Submit your comprehensive proposal for the approach California should utilize regarding the point of regulation and whether California should implement a cap-and-trade program at this time for the electricity sector. If you recommend that another approach be considered besides those detailed above, propose it here. If you recommend one of the above options, give as detailed a discussion as possible of how the approach would work.

While development of a federal or regional GHG trading system should not be a condition for *whether* California implements a cap and trade system, it should be the principal consideration in determining *the type* of trading system the state adopts. WPTF considers it highly probable that the federal government will enact GHG legislation within the next few years, and that this legislation will create a source-based emission trading system. WPTF therefore recommends that California pursue a first-seller approach, because a first-seller approach can be easily adapted to a source-based system at the federal level.

Q29. Address and compare how each of the alternatives identified in the above questions, and the proposal you submit in response to the preceding question, would perform relative to each of the principles or objectives listed above and any other principles or objectives you propose. For each alternative, address important tradeoffs among the principles.

WPTF considers that the starting point for comparison for evaluation of the alternatives discussed in this response is a traditional source-based emissions trading system. Source-based systems have a track record of reducing emissions cost-effectively in the United States and Europe, are simple to administer, create the appropriate price signal and incentives for investment in low-GHG technologies and fuels, and do not interfere with the functioning of wholesale electricity markets. A source-based approach is also the model that has been consistently proposed for federal legislation.

The only criterion which a California-only source-based system fails is environmental integrity, because in a California-only system it would be more prone to emission leakage. A first-seller approach addresses emission leakage issues until federal or regional markets are developed, and maintains all the advantages of a source-based system for in-state resources. In adopting such an approach, California should provide for emissions from imported power to be excluded at a later date, once these imports are regulated under an appropriate federal, or regional source-based program (i.e., the first seller approach is only needed for import of power from states that do not have a source based emission cap.)

Our evaluation of the alternatives in terms of the principles is shown in the table below.

Point of Regulation	Expandability	Cost-minimization	Environmental Integrity	Accuracy	Administrative Simplicity	MRTU	Legal Risk
Load-based, using contract and settlement data	- Would be Incompatible w/federal source-based system	High administrative costs	- Reduces leakage relative to source-based system; - Will not alter dispatch as does not provide carbon signal to generators - Highly prone to contract-shuffling	Low: Relies on default emission rates for unspecified power purchases	Requires tracking of schedules and contract and settlement data	Will split energy markets; clean energy to bilateral contracts, dirty to market	Can not assess
Load-based using TEACs	- Would be Incompatible w/federal source-based system	High initial costs of setting up tracking system	- Reduces leakage relative to source-based system; - Provides carbon signal to generators	High: Applies actual emission rate of generators	Requires tracking of schedules; Straight-forward once infrastructure is in place;	Compatible w/wholesale markets because carbon signal captured in bid price	Can not assess
Source-based	Likely model for federal system	Low overall cost	Most prone to leakage	High: Actual emissions of generators	Relies on data already reported by generators	Compatible w/wholesale markets because carbon signal captured in bid price	Proposed federal legislation
Source-based for in-state, load-based for imports	Can be collapsed to source-based under federal system	Higher administrative costs than source-based	Reduces leakage relative to source-based system	Medium: Uses default emission rates for unspecified imports	Requires tracking of schedules and contract and settlement data for imported power	Gives competitive advantage to out-of-state generators in CAISO markets	Can not assess

Point of Regulation	Expandability	Cost-minimization	Environmental Integrity	Accuracy	Administrative Simplicity	MRTU	Legal Risk
First-seller	Can be collapsed to source-based under federal system	Higher administrative costs than source-based	Reduces leakage relative to source-based system	Medium: Uses default emission rates for unspecified imports	Requires tracking of schedules and contract and settlement data for imported power	Compatible w/wholesale markets because carbon signal captured in bid price	Can not assess

Conclusion

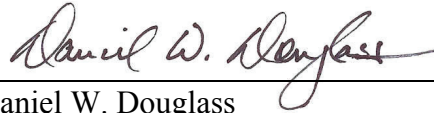
WPTF appreciates this opportunity to comment and the Commission's consideration of the comments listed herein.

Respectfully submitted,



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WESTERN POWER TRADING FORUM

December 3, 2007

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a copy of the foregoing Comments of the Western Power Trading Forum on Type and Point of Regulation for Reduction of Greenhouse Gas Emissions from the Electricity Sector on all parties of record in R.06-04-009 by serving an electronic copy on their email addresses of record and, for those parties without an email address of record, by mailing a properly addressed copy by first-class mail with postage prepaid to each party on the Commission's official service list for this proceeding.

This Certificate of Service is executed on December 3, 2007, at Woodland Hills, California.



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